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ABSTRACT

As the Internet is becoming more and more of a commonplace technology in the Western world, many communication programs have begun to offer technology-related communication courses. Usually, these classes require students to create a Web site. A good Web site, however, requires more than colored text, a few graphics, and a few links. This paper explores the Web site assignment as a valuable exercise. First, theoretical background is reviewed, as both students and instructors should be familiar with some of these concepts before creating a Web site. Second, a seven-step model is explained that forces students to think about their Web site before actually creating it. The paper's author/educator states that personal experience has proven that combining the background information and the seven steps leads to higher quality Web sites that students are not afraid to show potential employers. Contains 36 references. (NKA)

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The Website Assignment as a Valuable Exercise – Beyond Establishing Presence to Creating Significance

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BEST COPY AVAILABLE

Websites are booming. The range of topics on all these sites is enormous. Yet, not all pages are equally "good." The paper takes two steps. First, it defines what makes a web site "good." To accomplish this task a variety of fields will be covered, including web credibility, design and usability principles, and visual rhetoric and audience targeted message creation. The second step is an academic one, trying to find a motivation behind the common practice of teaching students to create (mostly unsophisticated) web sites without teaching them about at least some of the principles discussed above to turn this site into a "good" site. A seven-step assignment is presented that encourages students to combine theory and application to create valuable websites.

As the Internet is becoming more and more of a common place technology in the western world, many communication programs have begun to offer technology related communication courses. Usually, these classes require the students to create a website. Unfortunately, many times little time is spent on preparing the students adequately for this assignment, resulting in low-quality websites. Good writing is more than putting words on paper, and a good website requires more than colored text, a few graphics and a few links. This paper explores the website assignment as a valuable exercise. First, theoretical background is reviewed, as both students and instructors should be familiar with some of these concepts before creating a website. Second, a seven-step model is explained that forces students to think about their website before actually creating it. Personal experience has proven that combining the background information and the seven steps leads to higher quality websites that students are not afraid to show potential employers.

THEORETICAL BACKGROUND

Web Credibility

Credibility on the World Wide Web involves more than large numbers of people downloading the information provided on a website. This is easily measurable and can

offer comforting data in form of hits, which some (Paine, cited in Holtz, 1999) define as "an acronym for How Idiots Track Success."

Cutlip, Center and Broom's (1985) definition of credibility in the public relations context suits itself well for a general online context, too. The authors state, "The credibility of the communicator is determined by a person's intentions, trustworthiness, and expertness, as these qualities are perceived by the target audience." On the Internet, credibility refers to a number of factors, such as the currency of its imagery, the perceived trustworthiness of the source, or the perceived trustworthiness of the information itself.

As to measuring the perceived credibility of a website, there is much talk, but comparatively little research. The literature agrees that trust is a major issue online, and beyond simple WebTrust security issues that McKeon (1998) and Borkowski (1998) discuss. Usually, in interactions, trust is the result of experience, and thus, some of the same rules apply online and offline. These include background checks on both people and organizations, providing personal information sparingly, and checking for privacy statements (Goldberg 1998). But beyond just trusting the information providers, the web credibility issue also refers to the actual credibility of the information itself. In printed academic journals peer review is common to prevent the spread of false or unqualified information. Though these journals are developing online too, most website information remains un-reviewed. Due to the pure volume of this information, the Internet user can easily fall prey to false information. The source doesn't even always have to be bad intention, but simply may not know better.

In general, the surprisingly sparse literature on web credibility is divided into two fields. One field, mostly librarians, researches the quality of writing and the content of written sources provided. Kirk (1996) establishes six criteria for this kind of credibility under the guideline of caveat lector (Let the reader beware). They include checking for authorship, publishing body, point of view/bias, literature, accuracy, and currency. He also says that if something seems too good to be true, it probably is.

The other field concerned with web credibility is non-literary. Most websites including all the commercial websites fall into this category. In a widely quoted article Alexander and Tate (1999) and also Rettig and LaGuardia (1999) define criteria that should help establish the credibility of such a site. These include: authority, accuracy, objectivity, currency, audience, interaction features, content, design, usability and medium. Alexander and Tate also recommend to look at some specific usability issues such as the page titles and URL's because they tell users about the source, the use of frames, and features such as site maps and internal search engines. The problem is that even pages that follow all these criteria may appear very credible, while really are phony (Critchfield 1998).

So, while there is awareness, there is no solution as of yet. Web users must rely on their own critical thinking abilities, experience, and recommendations from sources they trust because they have established their expertise in the field of interest.

Usability and Design Principles

The term "usability" was well chosen, because the concept behind it is just that, the ability to use. More specifically, usability describes the ease of use a website

provides. Usability is not a web specific term, but has been applied to the web for several years now. It really implies two components, format and design, but most people who talk about usability refer only to the design part.

The format usability part is closely related to the way librarians and writers describe literary credibility online. Of course, as Critchfield (1998) points out, a well designed website appears more credible, regardless of true credibility of the information provided. But Morkes and Nielsen (1997) discuss some criteria that will help text online to have usability beyond credible content. For example, the authors point out that people online do not read, but they scan. Thus, text and pages both should be kept short and concise. The writing style should contain factual information. People will simply not read very much online. Conventional writing guidelines still apply, such as organization into paragraphs, etc., but Morkes and Nielsen recommend using summaries and the inverted pyramid style where specific information comes last. Internal search engines are also useful for searching text, and with these we are entering the domain of the design part of usability.

Binstock (1999) points out that designs need to be intuitive. This is strongly supported by Krug (2000). To Binstock, navigation and content are part of design, while Nielsen (2000) separates them. In any case, a web designer must create his or her page knowing what users will expect from the site, how they will access it, for what reasons, and how they will move within it. Testing is absolutely crucial, as Binstock (1999) points out. He recommends not letting testing confirm design, but to let it lead design. In a way, a website is never finished, and the usability of the site changes constantly, simply because users change.

Nielsen (2000) has analyzed a variety of websites over years, monitoring their development and design changes. One lesson many successful sites have learned is to use screen real estate wisely. Screen real estate refers to the space visible on the screen, and far too often most space is taken up for advertisements, navigational devices, and window controls, leaving little space for actual content. Others completely clutter their pages. Nielsen points out that white space is not bad if it is used for a purpose, such as assuring cross platform and resolution independent design.

As pointed out, internal search engines are looked upon favorably by users, and they are considered to provide usability. The reason is convenience. Of course, as Nielsen (2000) points out, the way results are reported is important, because it provides much information about the structure of the site. Just as search engines, links help people navigate within the site, and they can provide credibility by providing outside information. As Spool (1997) points out, users use text links before they click on images, and the graphic design of those images actually has little effect on usability. The better one can predict what links lead to, the easier it is to find desired information, and thus, the higher the usability. Spool makes an interesting observation. He says that browsing and information seeking are two completely different activities, and thus preference and usability assessments don't always match.

Instone (1997) provides a nine step usability list. 1) Visibility of the system status refers to knowing where I am and where I can go next. Site maps, page titles and the like help here. 2) Match between the system and the real world is reached through using lay language and a logical order of information that doesn't necessarily reflect the organization of the organization. 3) Use control and freedom is given through variable

screen width and fonts, a home button etc. 4) Consistency and standards in visual patterns, titles, headers, and design helps navigation and understanding. 5) Error prevention requires continuous updating and testing of the website. 6) Recognition rather than recall means to include instructions, repeat buttons and links, provide site maps and image maps. 7) Flexibility and efficiency of use is given through not using frames, easy bookmark titles, long-term URL's etc. 8) Aesthetic and minimalist design means that simple is better, and that less pertinent information should be linked at progressive levels of detail. 9) Help functions should be designed to offer solutions rather simply stating that there is a problem.

Probably one of the most important lessons to understand concerning usability is that usability is never perfect, and never finished. To achieve usability on a site, it has to be tested and improved constantly.

Visual Rhetoric

Visual rhetoric as a field is developing, especially with a focus on art. In the online context, some well known rhetorical principles can be applied easily without requiring art education.

One example are Aristotle's three means of persuasion, ethos, pathos, and logos, which are taught in any Liberal Arts Public Speaking course. Logos, originally referring to logic, equally refers to logical construction of a site. Is information located where it would b expected? Is navigation through the site intuitive? Ethos in the Aristotelian sense refers to the credibility of the speaker. In the online context, ethos refers more to the credibility of both information and owner of the website. Who are the sources for the

information presented? Is text written well? Pathos refers to emotion and liking, and in the online context can be compared to the "warm fuzzy" feeling that people get when looking at a website. Do users return to a site because they like it? Is the site visually appealing?

Rhetoric here has less to do with linguistic or discursive formations, and more with a combination of usability notions such as format and design with emotion. An example may be a Usenet site that has much logos, as information is arranged logically in threads, much ethos, as information is provided by people who may be friends, but little pathos, as the site itself, disregarding the content, is comparatively boring in its black-and-white text-only design.

However, visual rhetoric is more than principles of speech applied to a visual context. One of the particular strengths of visual rhetoric is the way in which it can express metaphor and even form community. The power of metaphor lies in connecting an unfamiliar concept, service or product with something familiar. Here, this combination is of something visual and something linguistic. Good examples are the metaphors that are used to describe the Internet, such as "Information highway," "Cyberspace," or "surfing the Net," and "downloading."

In the online context, a visual cue or symbol, usually culturally biases, reminds the viewer of a familiar concept, stimulating symbolic meaning, such as the dove representing peace, or the stature of liberty representing freedom. In this way, visual metaphors use a concrete form to represent abstract ideas. Online examples are the a house icon to represent "go to the homepage," or the email icon to represent "send me a message."

Through metaphorical means, visual rhetoric can create community. Historically, a community was a group of people living in the same town or neighborhood. Today, the Internet has collapsed all geographic boundaries and allowed the creation of "virtual communities," communities of people scattered worldwide who meet in an electronic environment to exchange ideas, share common resources and offer each other support.

This feeling of community is usually created through a combination of both language and visual aids. For example, using inclusive language or providing feedback options such as the email address or personalizing sites with the help of cookies are more linguistic devices. Membership only pages or "other people who bought this book" on Amazon.com are combination examples, and the use of school colors, logos, or photographs are visual means.

The combination of form and color is a specifically successful visual rhetoric device. In general, color focuses attention, reveals organization, and makes things more interesting and realistic. However, color can also interfere through association. It can distract, tire the eyes, and is unpredictable as it is displayed slightly differently on different computers. A yellow circle on a white background doesn't signify much, but in context and displayed on a blue background, it immediately signified "sun."

Thus, when creating a website, one must pay close attention to messages implied in certain colors by themselves or in combination with others, the form of any graphics, the arrangement of information on a site, and the combination of text and graphic to send unified messages.

WEBSITE ASSIGNMENT

Technology classes in communication programs are abounding. Some are more theoretical, some more practical. Some take a technical perspective, others a rhetorical. Despite numerous differences in the make-up of these technology classes, many have one thing in common: the website assignment. Conveniently, this assignment can be sold as a "real world" application exercise with the goal of making it more attractive to the students. After teaching ten technology classes in the past four semesters, I have learned that most students are eager to learn how to make a website, but unless the assignment is carefully crafted and directed by the instructor, the students gain little more than technical expertise at a very low level.

The main problem with the website assignment is the time allowed for its completion. The website is usually not the only assignment in the class, but in order to create even basic websites, a number of skills must be taught, such as a graphical website design program or basic HTML code, navigation of the web for information retrieval, and a file transfer protocol (FTP) program to upload the sites. If the instructor wants the sites to have any level of sophistication, usually a the basics of scanning and a graphics program must be taught, plus lectures of conceptual issues such as web credibility, usability, audience targeted message design, visual rhetoric and visual design. Finally, class time must be allowed for students to work on their websites. However, even this level of commitment does not always lead to "good" sites, as I have also learned from experience. Unfortunately, once uploaded most student sites are still immediately identifiable as such.

The goal, then, is to turn the website assignment into a task that is enjoyable for the students, and manageable for the instructor during the time allowed. As the end result of the assignment will be publicly available, students ought to be proud of their work, rather than regarding it as "just another assignment completed." Ideally, students will learn not just how to create a website, but also understand how to direct the communicative power such a document can have.

The most successful strategy according to my experience is based on van Hoosier-Carey's (1997) recommendations. Van Hoosier-Care describes the website assignment as a rhetorical exercise in the technical communication classroom. To him, the website truly is a written rhetorical document whose graphical elements are less important than the message they send. I disagree with him on this account. However, many of the recommendations he makes are what has evolved in my classroom as effective solutions to problems resulting from "just another assignment" and "let's just upload the site for now" attitudes.

One of the first problems are the seemingly different goals of instructor and students. These goals are not actually opposites, but may seem difficult to combine. Instructors want to teach students both technical and communicative or rhetorical skills. The website assignment seems a suitable tool as knowing how to create a website is heralded as the new "skill to have" for the job market for communication graduates. Students often are eager to learn how to make a website, but get frustrated easily by details. In order to save time, they often forego slightly more effective, visually more pleasing, and rhetorically more persuasive websites for those which, in technological terms, can be compared to the drawings of five-year olds.

A combined goal can be reached simply by structuring the assignment in a slightly different way. The following paragraphs will discuss each step in making the website assignment a valuable exercise.

- Step 1 – Lecture
- Step 2 – Analysis exercise
- Step 3 – Conceptualizing the website
- Step 4 – Preparing the design
- Step 5 – Analysis exercise
- Step 6 – Designing the website
- Step 7 – Presenting and redesigning the website

Step 1 – Lecture

When grammar school children learn how to read, they are not presented with a copy of Homer and asked to "figure out" the rest for themselves. Instead, they learn the letters of the alphabet first. Similarly, students about to design a website must be taught the principles that make up a website, the conceptual issues. In two or three one-hour lectures principles of web credibility, usability, and visual rhetoric can be discussed with references to other topics such as intellectual property, graphic design, and audience targeted message design. It helps to consistently show website examples that apply these principles to varying degrees, so that students can learn how to spot both good and bad examples. As Spool (1997) points out, a website can look beautiful, yet fail to convey any meaning. By following the lecture, the students' view is sharpened from the website as a whole to the components and the thought that went into the creation of a website.

Step 2 – Analysis Exercise

Directly following the days of lecture, students are given a homework assignment. The instructor provides each one with a website address and asks the students to analyze

the website according to the principles discussed in class. These websites can be chosen arbitrarily, but some should be "good" and some should be "bad" examples. About four to six students should always be given the same website address. During the next class session, the class is divided into small groups depending on website reviewed. Students are asked to share their observations. Usually, 15 minutes are enough for this part of the exercise. The remaining class time is spent on showing each website to the whole class while the group that reviewed this site shares their criticism or praise of these sites. The purpose of this exercise is to practice the theoretical skills acquired through lecture, but also to give students possible examples and ideas of what they want their own websites to look like or not.

Step 3 – Conceptualizing the Website

At this point, students usually want to begin designing their website by sitting down at the computer and typing in HTML code or using a graphical user interface program. Instead, students must remain in their project groups and begin the conceptual process of designing a website. As December and Ginsburg (1995, pp. 130-132) point out, this consists of:

- The rationale for the project – why it is needed, whether it adds information or services not available from existing sites.
- The target audience(s) – who potential users are, what characteristics or interests they share.
- The website's purpose – what service(s) the site aims to provide for the audience, what level of information detail or complexity is appropriate to the audience.

- The website's objective – what output the website needs to provide for the audience in order to carry out its purpose.
- The website's subject domain – what information the development team needs in order to make informed choices about the site's design and content.

If possible, students should be given a class session to talk about these issues. At this point, the instructor also should talk to each group and provide feedback. If no class time can be spared for this step and groups are required to meet outside the classroom, each group should make an appointment with the instructor for feedback purposes. Students tend to try to skip this step, but it is vitally important to understand these underlying conceptual issues, as otherwise the website will fail to communicate anything other than "This was a class assignment."

Step 4 – Preparing the Design

Closely related and possibly intertwined with the conceptualization of the website is its preparation on paper. Students should be required to prepare a story board for their website, drawing the connections and links between pages, and the graphical arrangement of text and image for each page. No great artistic skill is required, as the main purpose of this step is to understand the site's functionality, and not to present its beauty.

Step 5 – Analysis Exercise

Just as in the previous analysis exercise, the purpose is to detect strengths and weaknesses. The difference is that before, arbitrary online sites were analyzed. This time,

each group presents their results from Step Three and Four, defending their ideas before the class. Feedback and criticism from the class help greatly to improve the site, as many times class members notice what team members have overlooked, as van Hoosier-Carey (1997) also points out.

Step 6 – Designing the website

If this has not happened yet, students can be taught how to use the basics of a website development program in two or three class sessions. As they already have their designs in mind, the learning process is more rapid, because students automatically apply the new skills to their individual needs. Students will require about two class sessions to put the website together. Most of the work has already been done on paper, so lengthy discussions on where to find link addresses or what images to include will not hinder the technical process.

Step 7 – Presenting and Redesigning the Website

No website is ever perfect, and no good website is ever finished. Instead, websites should be thought of as processes in constant evolution. When the students have completed the website design step and have uploaded their site, they deserve to present their work in class once again, this time with the seemingly finished project. However, many times little kinks need to be fixed, or ideas that worked conceptually cause problems in application. The presentation of the website should be thought of as the final rehearsal. Students should be encouraged to make repairs and minor changes before supplying the instructor with the URL of their site for grading.

CONCLUSION

The seven steps discussed present a simple but effective plan of turning the website assignment into a useful project. Adding a few simple requirements such as the conceptualization stage and the paper design stage do not require much time, but result in higher quality websites. As communication scholars, we should be concerned with the messages we sent out to the Internet. In technical writing courses, a sloppy memo with formatting errors would never be accepted. Uploading a website with poor navigation or no conceptual backbone is the online version of a sloppy memo.

The website assignment allows the unique opportunity to combine theory with application in a way satisfying both to the instructor and to the students. However, just as a website needs a purpose, the website assignment needs to have a purpose beyond simply being an "assignment." Hopefully, the content and tips provided in this paper will help to develop and implement website assignments as valuable exercises, leaving behind websites that are there just to establish presence.

REFERENCES

Adler, P. (Ed.) (1992). Usability: turning technologies into tools. New York: Oxford University Press.

Alexander, J. E., & Tate, M. A. (1999). Web wisdom: how to evaluate and create information quality on the web. New Jersey: Lawrence Erlbaum Associates.

Borkowski, M. (1998). Credibility key to e-commerce. Canadian Electronics, 13 (7), 4.

Coe, M. (1996). Human factors for technical communicators. New York: John Wiley & Sons.

Critchfield, R. (1998). Credibility and web site design. Available at http://www.warner.edu/critchfield/hci/critchfield.html

Cutlip, S. M., Center, A. H., & Broom, G. M. (1985). Effective public relations. 6th Ed. Englewood Cliffs, NJ: Prentice Hall.

December, J., & Ginsburg, M. (1995). HTML and CGI unleashed. Indianapolis, IN: Sams.net.

Dennison, R. F. (1999). Web searching – A group project. The Technology Teacher, 58 (8), 6.

Dillon, A. (1994). Designing usable electronic text. Southport: Burgess Science Press.

Goldberg, B. (1998). Is trust different in cyberspace? Executive Excellence, 15 (11), 15-16.

Goubil-Gambrell, P. (1996). Designing effective Internet assignments in introductory technical communication courses. IEEE Transactions on Professional Communication, 39, 224-231.

Hix, D., & Schulman, R. S. (1991). Human-computer interface development tools: a

methodology for their evaluation. Communications of the ACM, 34 (3), 74-87.

Holtz, S. (1999). Public relations on the net. New York: Amacom.

Holtze, T. L. (2000). Applying learning style theory to web page design. Internet Reference Services Quarterly, 5 (2), 71.

Jordan, P. W. (1998). An introduction to usability. Bristol, PA: Taylor & Francis.

Kaufer, D. S., & Butler, B. S. (1996). Rhetoric and the arts of design. Mahwah, NJ: Erlbaum.

Kirk, E. (1996). Evaluating information found on the Internet. Available at http://milton.mse.jhu.edu:8001/research/education/net.html

Kostelnick, C. (1996). Supra-textual design: the visual rhetoric of whole documents. Technical Communication Quarterly, 5, 9-33.

Krug, S. (2000). Don't make me think!: a common sense approach to web usability. Indianapolis, IN: Que.

Mayhew, D. (1999). The usability engineering lifecycle: a practitioner's handbook for user interface design. San Francisco, CA: Morgan Kaufmann.

McKeon, P. (1998). Electronic commerce--bridging the security gap with WebTrust. Accountancy Ireland, 30 (3), 12-13.

Nielsen, J. (1993). Usability Engineering. Boston, MA: AP Professional.

Nielsen, J. (2000). Designing web usability. Indianapolis, IN: New Riders.

Norman, D. (1988). The design of everyday things. New York: Doubleday.

Radosevich, L. (1997, December). Fixing web-site usability. InfoWorld, 19 (50), 81-82.

Rettig, J., & LaGuardia, C. (1999, July/August). Beyond 'beyond cool': reviewing web resources. Online, 23 (4), 51-55.

Rubin, J. (1994). Handbook of usability testing: how to plan, design and conduct effective tests. New York: John Wiley & Sons.

Scarcella, J. A. (1999). Web authoring – How do I get started? The Technology Teacher, 59 (1), 13.

Scarcella, J. A. (1999). Web authoring – How do I get started? The Technology Teacher, 59 (1), 13.

Schriver, K. A. (1997). Dynamics in document design. New York: John Wile.

Spool, J. (1997). Web site usability: a designer's guide. North Andover, MA: User Interface Engineering.

Van der Meij, H. (1997). The ISTE approach to usability testing. IEEE Transactions on Professional Communication, 40 (3), 209-223.

Van Hoosier-Carey, G. (1997). Rhetoric by design: using web development projects in the technical communication classroom. Computers and Composition, 14 (3), 395-407.

Virzi, R. A. (1992). Refining the test phase of usability evaluation: how many subjects is enough? Human Factors, 34 (4), 457-468.

Wagner, P. D., & Wagner, T. A. (1997). The world wide web in the classroom. The Technology Teacher, 56 (5), 22.

Witmer, D. F. (1998). Introduction to computer-mediated communication: a master syllabus for teaching communication technology. Communication Education, 47 (2), 162.